

# PATENT SPECIFICATION

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## (54) COSMETIC FACE MASK

(71) We, MERZ & Co., a company organised under the laws of Germany, of Eckenheimer Landstrasse 100—104, Frankfurt/Main, Germany, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a cosmetic face mask.

Cosmetic face masks are used in skin care with the main object of stimulating the blood supply and tightening the skin. These cosmetic face masks can have various consistencies, for example they can be pastes or thickened solutions. Cosmetic face masks have hitherto been based on fat-free pastes or wax mixtures or viscous liquids in which the solvent, for example water, evaporates. Masks such as these are made up, for example, in accordance with the following basic formulations:

### 1. Fat-free pastes:

	by weight
Expanding clays (water-containing aluminium silicates)	15%
zinc oxide	2%
water	83%

### 2. Wax mixtures:

Solid paraffin with 10% by weight of beeswax added to it

### 3. Viscous liquids:

	by weight
Methyl cellulose	10%
glycerol	10%
water	80%

Before application, the masks based on expanding clays have to be made coatable with liquids. Wax mixtures have to be heated before they can be applied. Viscous solutions can only be applied with a brush in very thin layers, so that it is not possible to obtain a fairly thick, covering layer that retains heat,

as is the case with fat-free pastes and wax mixtures.

The fat-free pastes harden through gradual evaporation of the water. Following application, wax mixtures have to be allowed to cool so that they may harden. Evaporation is necessary in the case of viscous solutions containing water as the solvent, in order to obtain a thin film of the wax over the skin.

After they have been used, fat-free pastes and wax mixtures both of which effectively retain heat, have to be mechanically removed or washed off.

It has now been found that the retention of heat desired of the masks which opens the pores of the skin and stimulates the blood supply, can be obtained much more simply and effectively by using a foam mask as the face mask. Unlike fat-free pastes and wax mixtures, foam masks require only a small amount of solid constituents because the process of foaming provides a voluminous foam mask which may be brushed on to the skin in layers as thick as pastes based on clay or wax mixtures. Another advantage of these foam masks is that they are readily washed off. Alternatively, if they are not removed after use, they soon collapse on the skin to form a layer that is difficult to notice.

The present invention provides a pressurised composition adapted to form a foamed cosmetic mask upon release of the pressure thereof, which composition comprises

a) a foundation comprising a secondary or tertiary ester of orthophosphoric acid with a  $C_{16}$ — $C_{18}$  wax alcohol tetraethyleneglycol ether, cetyl stearyl alcohol, sodium cetyl stearyl sulphate, sodium lauryl sulphate, an alkali metal stearate, triethanolamine stearate, a condensation product of nonylphenol and 8—15 molecules of ethylene oxide and/or a secondary or tertiary ester of orthophosphoric acid with a fatty alcohol alkylene glycol ether or polyalkyleneglycolether,

b) a foam stabiliser comprising a salt of the condensation product of a saturated  $C_{12}$ — $C_{18}$  fatty acid and sarcosine, oleic acid oleyl

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vegetable fatty acids and/or isopropyl myristate,

ester, a triglyceride mixture of saturated

- 5 c) a liquid comprising water, whey, an aqueous solution of sorbitol and/or a mixture comprising up to 90% by weight of glycerol or a glycol and at least 10% by weight of water, and

- 10 d) a propellant for aerosol compositions. Conveniently, the compositions according to the invention comprise substantially 1% by weight of the foundation (a), 2% by weight of the foam stabiliser (b) and 97% by weight of the liquid (c), based on the total of (a), 15 (b) and (c).

- According to one advantageous embodiment of a composition according to the invention, the foundation (a) is a secondary or tertiary ester of orthophosphoric acid with 20 a  $C_{12}$ — $C_{14}$  wax alcohol tetraethyleneglycol ether, the foam stabiliser (b) is a salt of the condensation product of a saturated  $C_{12}$ — $C_{14}$  fatty acid and sarcosine, and the liquid (c) is water.

- 25 It is advisable to add liquid paraffin as an additional base, advantageously in a quantity of substantially 1% by weight, to the necessary components (a), (b) and (c) in order to soften the foam.

- 30 A particularly stable foam is formed when the water forming the liquid (c) is replaced either wholly or in part by whey.

- The addition of extracts of soya and/or lucerne also gives a more stable foam, through 35 the introduction of vegetable protein. Similarly, plant extracts containing saponin, for example horse chestnut and/or cyclamen, are suitable for use as foam-improving additives.

- 40 The foam can be stabilised and the skin-tightening effect improved by the addition of swelling agents such as gelatin, tragacanth, carrageen, alginates, pectin, agar-agar, guar flour, gum arabic, methyl cellulose, carboxymethyl cellulose, and/or polyvinyl pyrrolidone. 45

#### WHAT WE CLAIM IS:—

1. A pressurised composition adapted to form a foamed cosmetic mask upon release 50 of the pressure thereof which composition comprises:

- a) a foundation comprising a secondary or tertiary ester of orthophosphoric acid with a  $C_{12}$ — $C_{14}$  wax alcohol tetraethyleneglycol ether, cetyl stearyl alcohol, sodium cetyl 55 stearyl sulphate, sodium lauryl sulphate, an

alkali metal stearate, trichanolamine stearate, a condensation product of nonylphenol and 8—15 molecules of ethylene oxide and/or a secondary or tertiary ester of orthophosphoric acid with a fatty alcohol alkylene glycol ether or polyalkyleneglycoether, 60

b) a foam stabiliser comprising a salt of the condensation product of a saturated  $C_{12}$ — $C_{14}$  fatty acid and sarcosine, oleic acid oleyl 65 ester, a triglyceride mixture of saturated vegetable fatty acids and/or isopropyl myristate,

c) a liquid comprising water, whey, an aqueous solution of sorbitol and/or a mixture comprising up to 90% by weight of glycerol or a glycol and at least 10% by weight of 70 water, and

d) a propellant for aerosol compositions.

2. A composition as claimed in claim 1 which comprises substantially 1% by weight of the foundation (a), 2% by weight of foam 75 stabiliser (b), and 97% by weight of liquid (c), based on the total of (a), (b) and (c).

3. A composition as claimed in claim 1 or 2 wherein the foundation (a) is a secondary or tertiary ester of orthophosphoric acid with a  $C_{12}$ — $C_{14}$  wax alcohol tetraethyleneglycol 80 ether, the foam stabiliser (b) is a salt of the condensation product of a saturated  $C_{12}$ — $C_{14}$  fatty acid and sarcosine, and the liquid (c) is water. 85

4. A composition as claimed in any of claims 1 to 3 which comprises an extract of soya, lucerne, horse chestnut and/or cyclamen as a foam-improving additive. 90

5. A composition as claimed in any of claims 1 to 4 which comprises a swelling agent, such as gelatin, tragacanth, carrageen, an alginate, pectin, agar-agar, guar flour, gum 95 arabic, methyl cellulose, carboxymethylcellulose and/or polyvinyl pyrrolidone.

6. A composition as claimed in any of claims 1 to 5 which comprises liquid paraffin as a foam softening agent.

7. A composition as claimed in claim 6 comprising substantially 1% by weight of liquid paraffin, based on total (a), (b) and (c). 100

8. A composition as claimed in claim 1 substantially as hereinbefore described. 105

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